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July 29, 2005

TO:

Commissioner for Patents

FROM:

Brett A. Hertzberg

ATTN: Examiner Jermele M. Hollington

P.O. Box 1450 Alexandria, VA 22313-1450

OUR REF: 50019.261USI1/P05695P01

[BAH/ab]

Total pages, including cover letter: 5

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Documents Transmitted: Fax Coversheet; Response to Restriction Requirement

Title:

ADAPTIVE SLOPE COMPENSATION FOR SWITCHING

REGULATORS

Applicant:

Michael Eugene Broach et al.

Serial No.:

10/780,375

Filed:

February 17, 2004

Group Art Unit: 2829

Our Ref. No.:

50019.261USI1/P05695P01

Confirmation No. 1831

Name: Alice Baum

JUL 2 9 2005

S/N 10/780,375

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Michael Eugene Broach et al.

Examiner:

Jermele M. Hollington

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CERTIFICATE UNDER 37 CFR 1.6(d): I hereby certify that this correspondence is being sent via facsimile to (571) 273-8300, Commissioner for Patents, Arm: Examiner Jermele M. Hollington, P.O. Box 1450, Alexandria, VA 22313-1450 on July 29, 2005.

Name: Alice Baum

RESPONSE AND PROVISIONAL ELECTION

VIA FACSIMILE #571-273-8300

Commissioner for Patents

ATTN: Examiner Jermele M. Hollington

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action mailed June 30, 2005, applicants respectfully submit this following Response and Provisional Election to the Restriction Requirement made by the Examiner under 35 U.S.C. 121. The restriction requirement was made for the following inventions:

- I. Claims 1-9, drawn to an apparatus for adjusting slope having a divider block and ramp generator, classified in class 324, subclass 117R.
- II. Claims 10-15, drawn to an apparatus of adjusting slope having two current sources and a capacitor circuit, classified in class 324, subclass 158.1.

III. Claims 16-20, drawn to an apparatus for adjusting slope having measuring a parameter, classified in class 324, subclass 654.

The Examiner states that the inventions are distinct, each from the other for the following reasons:

"Inventions I, II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are show to be separately usable. In the instant case, invention I has separate utility such as a divider block and ramp generator, invention II has separate utility such as a capacitor circuit and invention III has separate utility such as means for measuring a parameter that is associated with an inductor."

Applicants provisionally elect to prosecute the invention taught by Group III, which corresponds to claims 16 - 20. Applicants respectfully traverse the restriction requirement with respect to Groups I - II, which corresponds to claims 1 - II for the reasons stated below.

Claim 16 includes common subject matter with respect to claims 1 - 15 (Groups I - II). Each of the independent claims (1, 10, 16 and 19) is directed to: "adjusting slope compensation in a switching regulator that includes an inductor". Slope compensation is a distinct technology area for a class of products referred to as switching regulators.

Each of the independent claims (1, 10, 16 and 19) has common features in that "slope compensation" is adjusted in response to "a measurement" that is associated with the inductor in the switching regulator. Claim 1 reads in pertinent part "the second signal is related to a measured value associated with the inductor ... " and "... the slope of the ramp signal [is] dynamically adjusted in response to ... the measured value associated with the inductor ...".

Claim 10 reads in pertinent part "... a second current that is related to a measure value (VI)

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associated with the inductor..." and "... the slope is dynamically adjusted in response to changes in ... the measured value associated with the inductor." Claim 16 reads in pertinent part "measuring a parameter associated with the inductor", "providing a measurement signal that is associated with the measured parameter", and "adjusting a slope ... in response to the measurement signal." Claim 19 reads in pertinent part, "measuring a parameter that is associated with the inductor", "providing a measurement signal that is associated with the measured parameter", and "adjusting a slope ... in response to the measurement signal."

For at least the reasons described above, it is believed that the subject matter that is identified by groups I and II (claims 1 - 15) are common with the subject matter that is identified by group III (claims 16 - 20). Applicant does respectfully submit that there will be no undue burden on the Examiner to also search for the subject matter that is recited in claims I - 15 (Groups I and II).

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In view of foregoing comments, the restriction requirement with respect to claims 1 - 20 is traversed and notice to that effect is earnestly solicited. It is believed that all pending claims are allowable and in condition for allowance. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicant at the telephone number provided below.

Respectfully submitted,

MERCHANT & GOULD P.C.

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